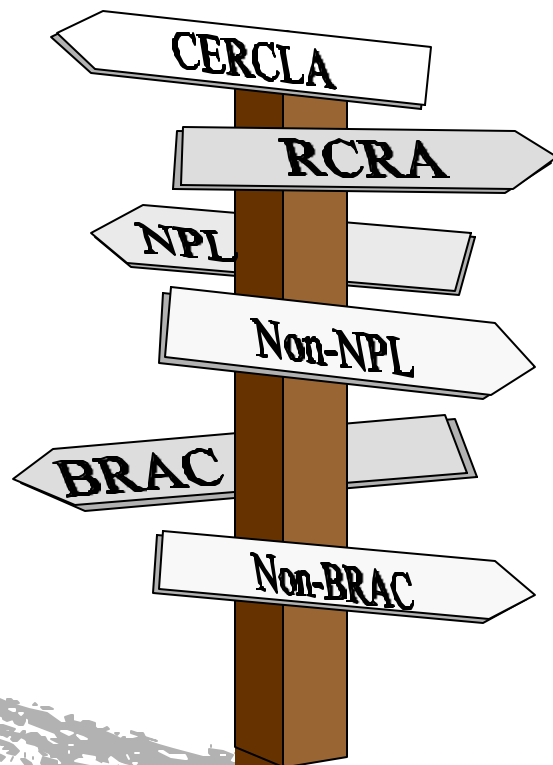


# The Road to Site Closeout



***“Finishing the Job”***

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**BRAC Cleanup Team Workshops - Site Closeout**

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***“We are at the beginning of the  
end of our cleanup program.”***

**—Sherri W. Goodman**

**Deputy Under Secretary of Defense  
(Environmental Security)**



***BRAC Cleanup Team Workshops - Site Closeout***

# Program Focus is Changing

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- **To Date: Last Remedy in Place (LRIP)/ Construction Completion(CC)**
- **Today: Identifying requirements beyond LRIP/CC**
- **Tomorrow: Complete cleanup and close out sites**



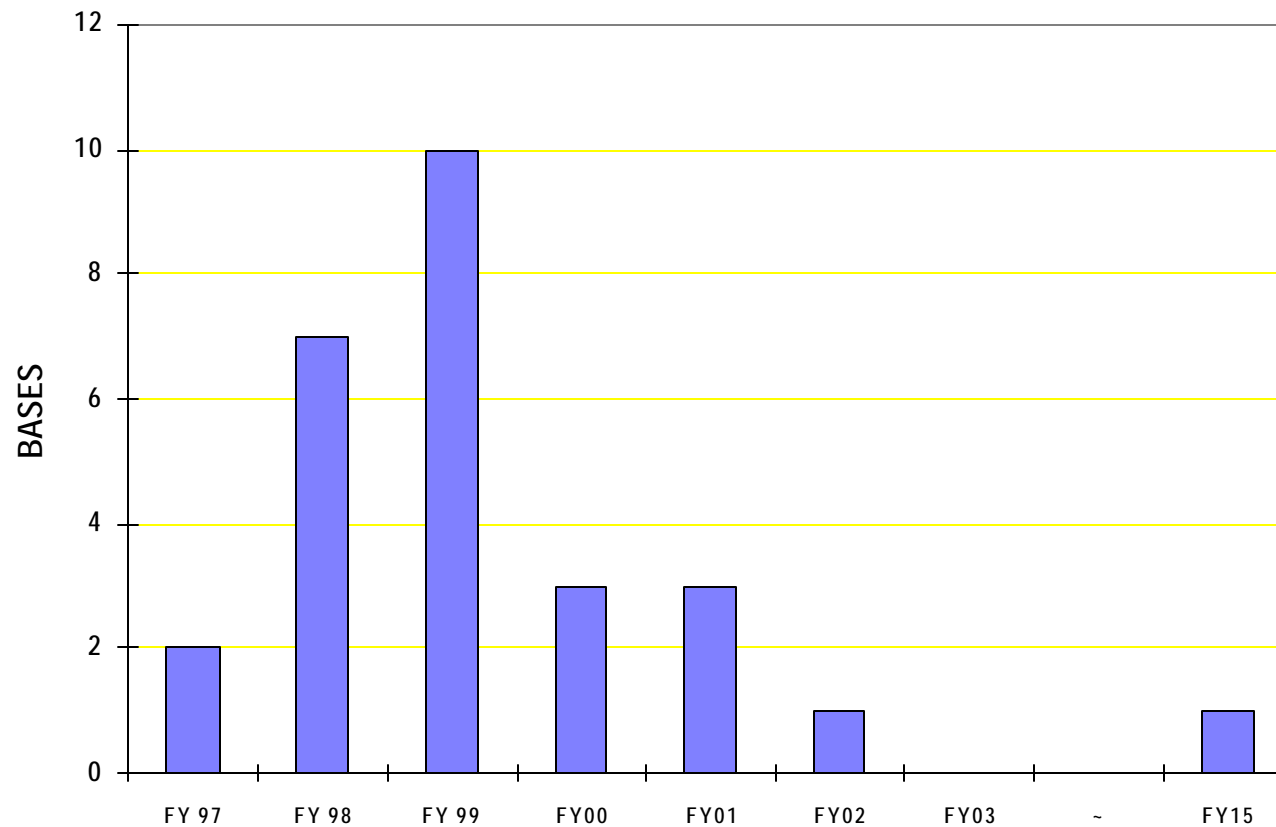
# Issues and Challenges Beyond LRIP/CC

- **Conventional Wisdom: Everyone is happy after LRIP/CC is achieved!**
- **Reality: Requirements to reach site closeout extend beyond LRIP/CC and raise new types of issues and challenges! However,**

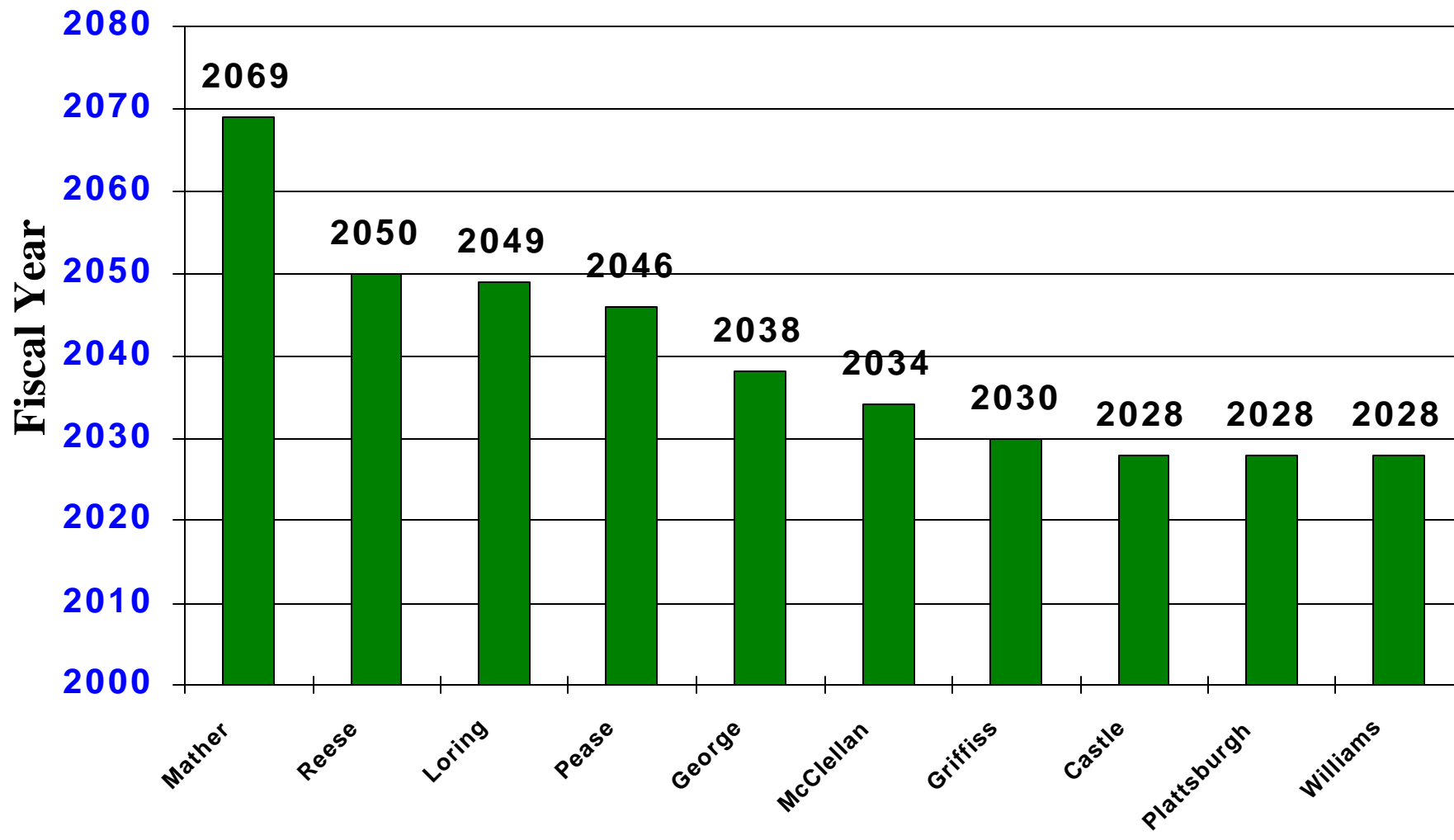
***“One size doesn’t fit all”***



# Air Force BRAC Last Remedy In Place



# Estimated AF BRAC Site Closeout Dates



**BRAC Cleanup Team Workshops - Site Closeout**

# Site Closeout Considerations

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- **CERCLA and RCRA Corrective Action sites**
- **NPL and Non-NPL facilities**
- **BRAC and Non-BRAC installations**
- **Federal and State regulatory requirements**
- **Community involvement**



# Comparison of Milestones/Terminology\*

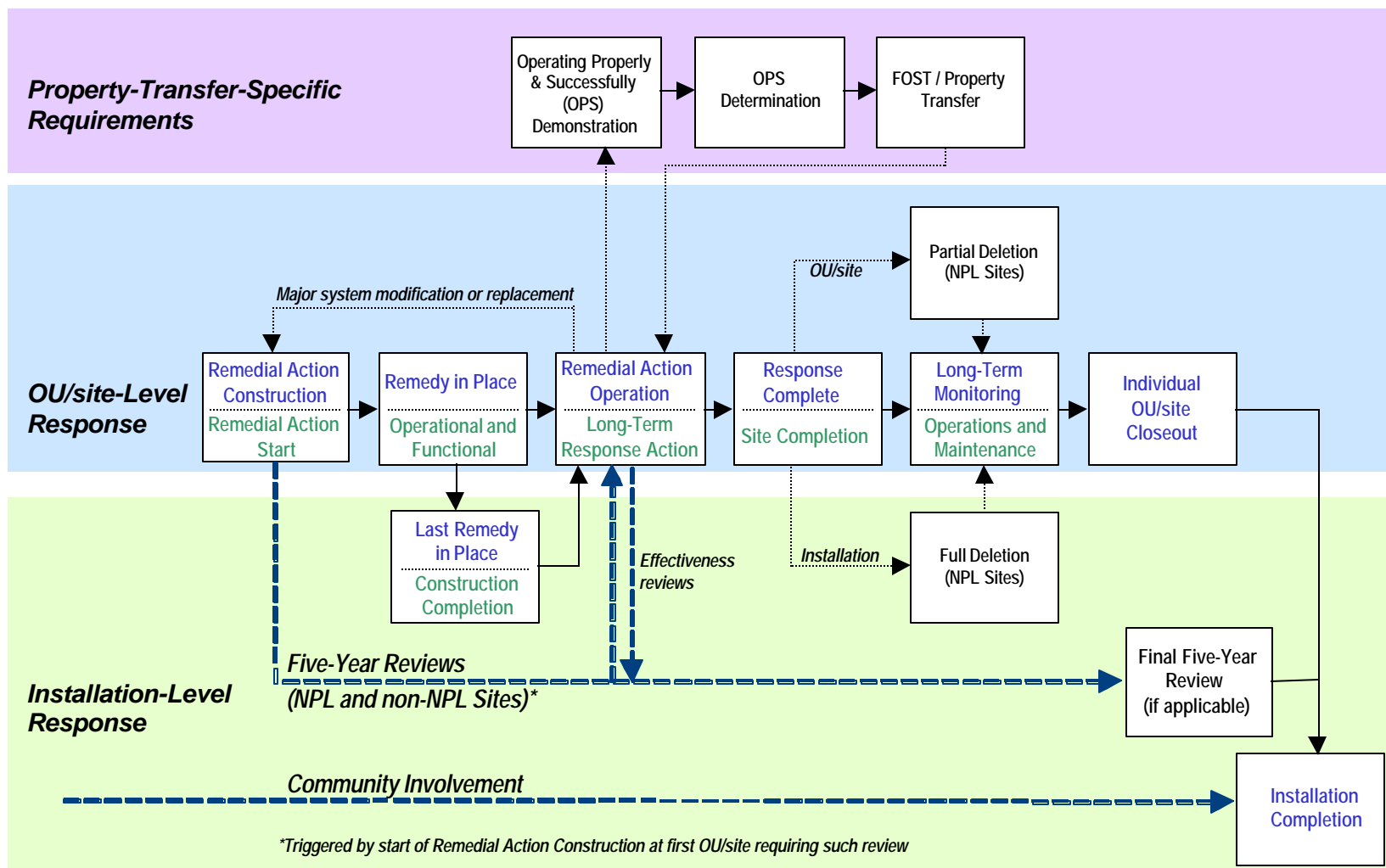
<b>DoD Milestones</b>	<b>CERCLA Milestones</b>	<b>RCRA Milestones</b>
<b>Site Discovery</b>	<b>Site Discovery</b>	<b>RCRA Facility Assessment</b>
<b>Preliminary Assessment/ Site Investigation</b>	<b>Preliminary Assessment/ Site Investigation</b>	
<b>Remedial Investigation</b>	<b>Remedial Investigation</b>	<b>RCRA Facility Investigation</b>
<b>Feasibility Study</b>	<b>Feasibility Study</b>	<b>Corrective Measures Study</b>
<b>Record of Decision</b>	<b>Record of Decision</b>	<b>Statement of Basis</b>
<b>Remedial Design</b>	<b>Remedial Design</b>	<b>Corrective Measures Implementation</b>
<b>Remedial Action – Construction</b>	<b>Remedial Action</b>  (including RA-Start, Operational and Functional Determination, RA– Complete, and Long-Term Response Action [if required])	(including design, construction, operation, maintenance, and monitoring)
<b>Remedy in Place</b>		
<b>Remedial Action – Operation (if required)</b>		
<b>Last Remedy in Place</b>	<b>Construction Completion (all OUs/Entire Installation)</b>	
<b>Response Complete</b>	<b>Site Completion (all OUs/Entire Installation)</b>	
	<b>NPL Deletion</b>	<b>Corrective Measures Completion</b>
<b>Long-Term Monitoring (LTM)</b>	<b>Operation and Maintenance (including LTM)</b>	
<b>Site Closeout</b>		

\* States may have similar or analogous milestones or terminology.





# Site Closeout Process



# Site Closeout Requirements: What Remains?

## ***“Cleanup, Cleanup, Cleanup”***

- **Operation and maintenance of cleanup systems**
- **Implementing/monitoring institutional controls**
- **Findings of Suitability to Transfer (FOSTs), Deeds**
- **Community involvement**
- **Performance reviews for cleanup systems**
- **Cleanup system modifications/upgrades/security**
- **Final close out reports for installations**
- **Long-term monitoring**
- **Cleanup system/monitoring well decommissioning**
- **Deletion from National Priorities List**



# Mather AFB Air Stripping Treatment Plant



***BRAC Cleanup Team Workshops - Site Closeout***



# March AFB Groundwater Extraction Well



***BRAC Cleanup Team Workshops - Site Closeout***

# Site Closeout Challenges

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- **Leaving contamination in place**
- **Community concerns about process**
- **Ineffective cleanup systems**
- **Remedy in place disturbed**
- **Security/integrity of cleanup systems**
- **Monitoring/enforcement of institutional controls**
- **Future changes in land use and continued protectiveness**
- **Discovery of additional contamination**
- **Perception of leaving before the job is complete**



# DoD Site Closeout Tools/Resources

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- **Air Force Long-Term Monitoring Optimization Guide, Oct 97**
- **Air Combat Command Site Closure Guidance Manual, Dec 97**
- **Army Practical Guide to NPL Completion and Deletion Procedures, Dec 94**
- **Air Force No Further Response Action Planned (NFRAP) Guide, Jun 95**
- **Air Force Operating Properly and Successfully Guidance, Dec 97**
- **DoD Institutional Controls Guide, Mar 98**

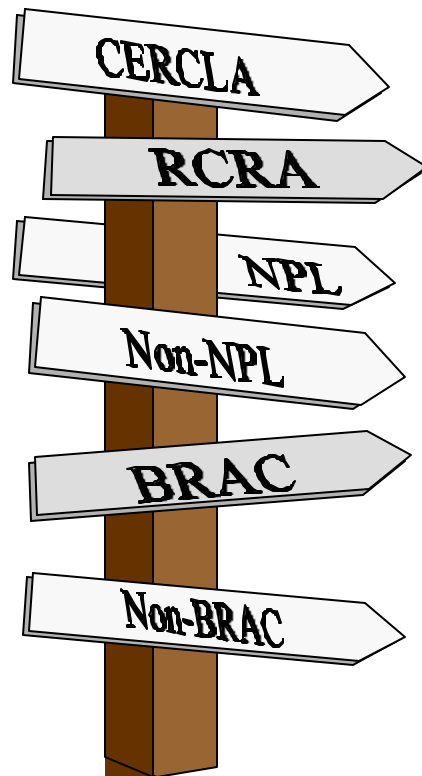


# EPA Site Closeout Tools/Resources

- **Closeout Procedures for NPL Sites**
  - **OSWER Directive 9320.2-09, Aug 1995**
- **Structure and Components of Five-Year Reviews**
  - **OSWER Directive 9355.7-02, May 1991**
- **Supplemental Five-Year Review Guidance**
  - **OSWER Directive 9355.7-02A, Jul 1994**
- **Operating Properly and Successfully Guidance**
  - **Federal Facilities Restoration and Reuse Office, Aug 1996**
- **Procedures for Partial Deletions at NPL Sites**
  - **OERR Directive 9320.2-11, Apr 1996**



# Site Closeout Working Group



- **DoD, Services, EPA, and States**
- **Working Group Internet Web Site**
  - *<http://www.afbca.hq.af.mil/closeout>*
- **Working Draft Documents**
  - *Environmental Site Closeout Process, Jan 98*
  - *Site Closeout Process Guide Introduction, May 98*
- **Interim Final Site Closeout Process Guide, Summer 98 (projected)**





# Summary

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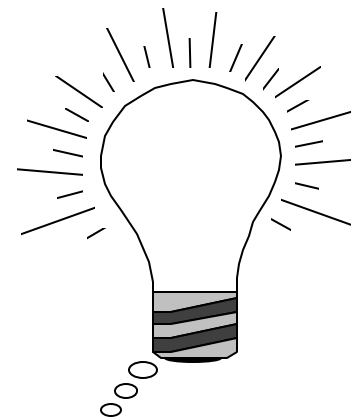
- **Cleanup requirements remain beyond LRIP/CC to achieve site closeout**
- **Partnering among stakeholders (Services, regulatory agencies, and communities) necessary to determine requirements and address challenges**
- **Adequate funding required to complete cleanup and address site closeout challenges**



# Role of BCTs

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- **Understand Federal and State requirements for various components of the site closeout process**
- **Ensure “Beyond LRIP/CC” requirements are fully characterized and budgeted for**
- **Consider innovative, flexible, and streamlined approaches to expedite site closeout and manage costs**



# BCT Workshops - What's Available?

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## ■ **Tomorrow - Technical Breakout Sessions**

- **Site Closeout (1:30 p.m.)**
- **RAO/LTM Optimization (3:30 p.m.)**

## ■ **Thursday - Facilitated Discussion**

- **Site Closeout (8:00 a.m.)**

## ■ **Environmental Site Closeout Process Guide**

- ***Introduction Working Draft (Handout)***

